

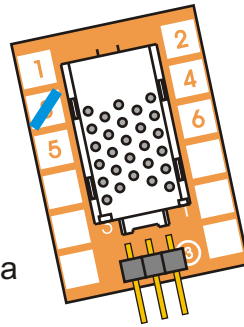
OWNER'S MANUAL

P/N 33CSHUMID-01

Humidity Module

When installed, the thermostat may have* the ability to:

- Control a compatible humidifier
- Display relative humidity level as measured at the thermostat
- Dehumidify (Cool to dehumidify, reheat, control a dehum. terminal equipped furnace board).



*Compatible with thermostat models:
33CS450-01, 33CS420-01 &
33CS400-01*

for a complete list contact Carrier

Complete Control from

Carrier

Overview

This unique accessory allows you to view and control the humidity level using only your thermostat and HVAC unit.

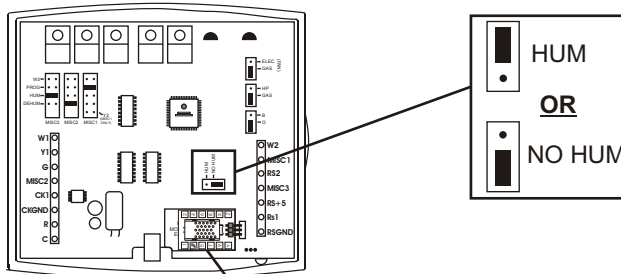
Depending on the model number of your thermostat the humidification options are:

- View the ambient humidity at the thermostat location
- Control a humidifier with the HUM terminal on the thermostat
- Dehumidify using only the air conditioner
- Dehumidify with Reheat using your HVAC's second stage electric strip heater
- Dehumidify using the DEHUM terminal on your furnace's circuit board

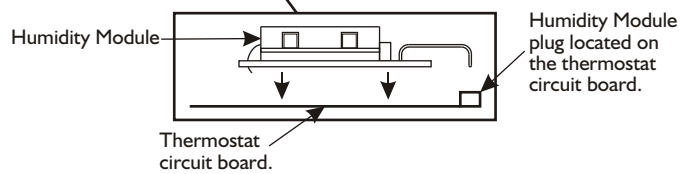
Installation

The humidity accessory is inserted into the humidity plug on the back of the thermostat and the Humidity Jumper is set for HUM operation.

- 1 Humidity Jumper**
Set this jumper for HUM.



- 2 Humidity Module
Model 33CSHUMID-01**
Plug the module into the appropriate connection terminal on the circuit board of the thermostat, as shown.



Humidity Operation

To control a MISC output for humidification, place the MISC1, MISC2, or MISC3 jumper on the terminal labeled HUM. This will supply 24VAC to the selected MISC terminal on the backplate of the thermostat when the humidity in the home falls below the setpoint you have chosen. The value for this setpoint ranges from 0% to 60%. Only one of the three outputs (MISC1, MISC2, or MISC3) is required to have this jumper. *For more information regarding the MISC1, MISC2, and MISC3 outputs and regarding the Humidity setpoint, please consult your Owner's Manual.*

The Fan may also be programmed to automatically energize any time there is a call for humidity. *For more information regarding energizing the Fan with Humidification operation, please consult your thermostat's Owner's Manual.*

Dehumidifying With The DEHUM Terminal*

Dehum Terminal: To control a MISC output for dehumidification, place the MISC1, MISC2, or MISC3 jumper on the terminal labeled DEHUM. This will supply 24VAC to the selected MISC terminal when the humidity in the home is above the setpoint you have chosen. Only one of the three outputs (MISC1, MISC2, or MISC3) is required to have a jumper. *For more information regarding the MISC1, MISC2, and MISC3 outputs, please consult your thermostat Owner's Manual.*

When the indoor humidity falls below the setpoint you have selected, the MISC terminal will be de-energized. The value for this setpoint ranges from 25% to 99%. To utilize this feature your HVAC unit must be equipped with a DEHUM terminal. *For more information regarding dehumidification using the DEHUM terminal, please consult your thermostat's Owner's Manual.*

****Dehumidifying with the DEHUM terminal may not be available with your thermostat model number. Please consult your Owner's Manual for details.***

Dehumidifying With Air Conditioning*

Cool to Dehumidify: If Cool to Dehumidify is on and the Humidity Module is installed, the thermostat has the ability to initiate a cooling cycle for advanced dehumidification operation. When the thermostat detects the humidity percentage is above the setpoint for dehumidification, and heating or cooling is not on, the thermostat will force the compressor to run with the fan, thus reducing moisture in the air. The green LED will blink once every eight seconds to indicate this is taking place. This feature will also allow you to adjust the cooling overshoot of the setpoint, from 0° to 5°.

For Example: If the cooling overshoot is set for 3°F and the cooling setpoint is set for 74°F, then as long as the room temperature reads between 71°F and 74°F this feature will energize the compressor and fan to dehumidify the air.

When the indoor humidity falls below the setpoint you have selected, the Cool to Dehumidify function will be de-energized. The value for this setpoint ranges from 25% to 99%. *For more information regarding dehumidification using the air conditioner, please consult your Owner's Manual.*

**Cool to Dehumidify may not be available with your thermostat model number. Please consult your Owner's Manual for details.*

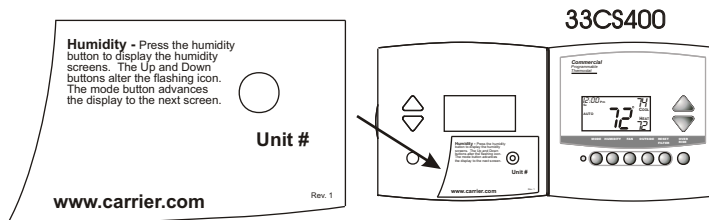
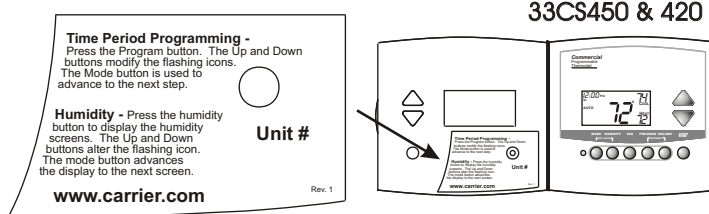
Reheat with Cool to Dehumidify*

Reheat: This feature allows the thermostat to turn on Electric Heating (W2) during Cool to Dehumidify (see *previous page*) to maintain room temperature until the dehumidification setpoint is reached. The cooling cycle will allow for the dehumidification of the air to occur while the Electric Heating will allow for a constant room temperature. If Reheat is enabled, the Aux icon will appear on the display during Cool to Dehumidify operation. *For more information regarding Reheat operation, please consult your thermostat's Owner's Manual.*

**Reheat with Cool to Dehumidify may not be available with your thermostat model number. Please consult your Owner's Manual for details.*

Label Selection and Placement

The Humidity Module package includes two door labels. Depending on which model thermostat you have purchased, choose the correct label and affix it to the thermostat as shown in the diagrams below.



Warranty

One-Year Warranty - This Product is warranted to be free from defects in material and workmanship. If it appears within one year from the date of original installation, whether or not actual use begins on that date, that the product does not meet this warranty, a new or remanufactured part, at the manufacturer's sole option to replace any defective part, will be provided without charge for the part itself provided the defective part is returned to the distributor through a qualified servicing dealer.

THIS WARRANTY DOES NOT INCLUDE LABOR OR OTHER COSTS incurred for diagnosing, repairing, removing, installing, shipping, servicing or handling of either defective parts or replacement parts. Such costs may be covered by a separate warranty provided by the installer.

THIS WARRANTY APPLIES ONLY TO PRODUCTS IN THEIR ORIGINAL INSTALLATION LOCATION AND BECOMES VOID UPON REINSTALLATION.

LIMITATIONS OF WARRANTIES – ALL IMPLIED WARRANTIES (INCLUDING IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY) ARE HEREBY LIMITED IN DURATION TO THE PERIOD FOR WHICH THE LIMITED WARRANTY IS GIVEN. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE MAY NOT APPLY TO YOU. THE EXPRESSED WARRANTIES MADE IN THIS WARRANTY ARE EXCLUSIVE AND MAY NOT BE ALTERED, ENLARGED, OR CHANGED BY ANY DISTRIBUTOR, DEALER, OR OTHER PERSON WHATSOEVER.

ALL WORK UNDER THE TERMS OF THIS WARRANTY SHALL BE PERFORMED DURING NORMAL WORKING HOURS. ALL REPLACEMENT PARTS, WHETHER NEW OR REMANUFACTURED, ASSUME AS THEIR WARRANTY PERIOD ONLY THE REMAINING TIME PERIOD OF THIS WARRANTY.

THE MANUFACTURER WILL NOT BE RESPONSIBLE FOR:

1. Normal maintenance as outlined in the installation and servicing instructions or owner's manual, including filter cleaning and/or replacement and lubrication.
2. Damage or repairs required as a consequence of faulty installation, misapplication, abuse, improper servicing, unauthorized alteration or improper operation.
3. Failure to start due to voltage conditions, blown fuses, open circuit breakers or other damages due to the inadequacy or interruption of electrical service.
4. Damage as a result of floods, winds, fires, lightning, accidents, corrosive environments or other conditions beyond the control of the Manufacturer.
5. Parts not supplied or designated by the Manufacturer, or damages resulting from their use.
6. Manufacturer products installed outside the continental U.S.A., Alaska, Hawaii, and Canada.
7. Electricity or fuel costs or increases in electricity or fuel costs for any reason whatsoever including additional or unusual use of supplemental electric heat.
8. ANY SPECIAL INDIRECT OR CONSEQUENTIAL PROPERTY OR COMMERCIAL DAMAGE OF ANY NATURE WHATSOEVER. Some states do not allow the exclusion of incidental or consequential damages, so the above may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

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